HARMONY 2

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HARMONY 2

SECONDARY DOMINANTS

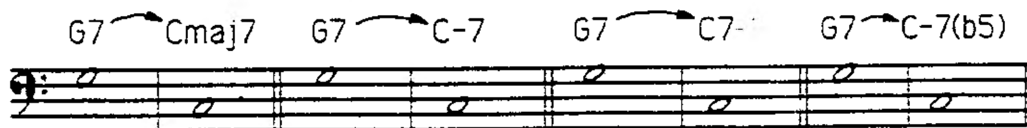
The strongest characteristic of dominant resolution is root motion down a perfect fifth. The "**primary dominant**" in the key of C is G7:



The "**secondary dominants**" in the key of C are:



A dominant chord's resolution may be to ANY quality of chord a perfect fifth lower except a diminished 7th chord:



The chord of resolution could therefore be any diatonic chord in a major or minor key.

C: G7 → Cmaj7 (Imaj7) | G: G7 → Cmaj7 (IVmaj7) | Bb: G7 → C-7 (II-7)

Ab: G7 → C-7 (III-7) | Eb: G7 → C-7 (VI-7) | F: G7 → C7 (V7)

When a secondary dominant resolves as expected (down a perfect fifth to the diatonic chord), an arrow is used to show the resolution.

The analysis of a secondary dominant will reflect its expected diatonic chord of resolution:

Bb: V7/II G7 → II-7 C-7 | Ab: V7/III G7 → III-7 C-7 | G: V7/IV G7 → IVmaj7 Cmaj7

F: V7/V G7 → V7 C7 | Eb: V7/VI G7 → VI-7 C-7

As with the analysis V7/I (V7 of I), the diagonal slash means "of". (V7/II = V7 of II.) Also note that it is not necessary to indicate the quality of the chord of resolution in the analysis symbol.

All secondary dominants have certain common characteristics.

1) They are non-diatonic structures. (At least one of their chord tones is NOT in the key.)
2) They are expected to resolve to a diatonic chord a perfect fifth below.
3) They are all built upon a diatonic root.

This last characteristic (a diatonic root) is the reason for V7/VII in a major key being omitted from the category. The root a perfect fifth above VII-7(b5) is not diatonic.

AVAILABLE TENSIONS - SECONDARY DOMINANTS

Tensions on secondary dominant chords will reflect the diatonic function of the chord:

C: V7/II V7/III V7/IV V7/V V7/VI

A7 B7 C7 D7 E7

The available tensions are those which meet the previous criteria: non-chord tones which are diatonic and which are a major ninth above chord tones. However, with dominant chords there are some important exceptions to the major 9th - above- a - chord tone rule.

1) The tension b9 IS available on dominant chords if it is diatonic, or if it is indicated in the chord symbol.
2) Tension b13 is available on dominant chords if it is diatonic.
3) Tensions b9 and #9 may coexist on the same dominant chord if either one (or both) is diatonic.

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CHART OF AVAILABLE TENSIONS FOR SECONDARY DOMINANTS

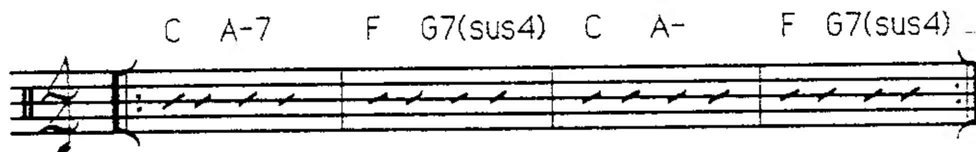
Chord:	Available Tensions:	Optional Available Tensions:
V7/II	9, b13	#9 (diatonic) and b9*
V7/III	b9, b13	#9
V7/IV	9, 13	
V7/V	9, 13	#9 (diatonic) and b9*
V7/VI	b9, b13	#9

*Since 9 and #9 are both diatonic to these chords, either may be available to the chord, **but not together**. If #9 is available, b9 may also be used.

HARMONIC RHYTHM

The number of beats per chord within a progression is called "**harmonic rhythm**". In 4/4 time, the most common harmonic rhythms are 2, 4, and 8 beats:

Harmonic rhythm of 2 beats per chord:



Harmonic rhythm of 4 beats per chord:



Harmonic rhythm of 8 beats per chord:



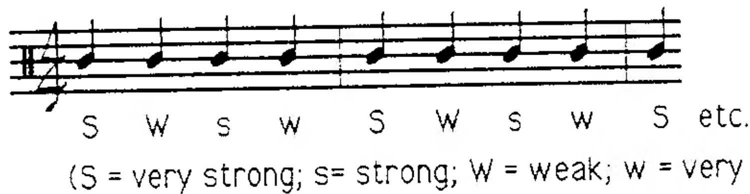
In 3/4, the most common harmonic rhythms are 3 or 6 beats:





Chords in a progression will receive strong or weak stress, depending upon their placement. This relative strength or stress will often determine the chord's function.

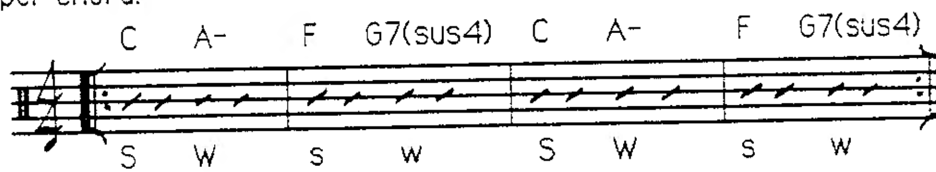
In any grouping of four pulsations, the first pulse is the strongest the last pulse is the weakest; the second pulse is weak; the third pulse is strong.



(S = very strong; s= strong; W = weak; w = very weak.)

This stress pattern holds true for harmonic rhythms of:

2 beats per chord:



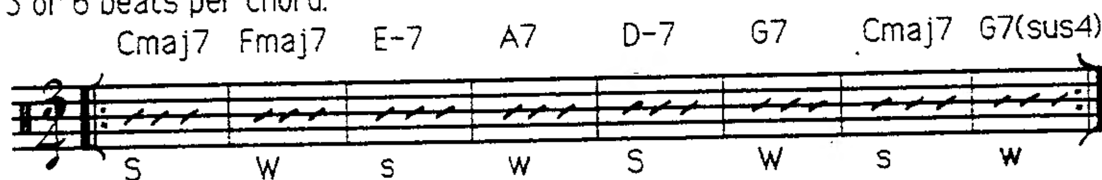
4 beats per chord:



8 beats per chord:



3 or 6 beats per chord:





Cadences most often occur from a weak beat to a stronger beat:

Since the V7 chord is the primary cadence chord of the key, it is typically found on a weak stress point:

Tonic chords are therefore usually found at stronger stress points.

This characteristic of dominant resolution from weak stress to stronger stress is also found when secondary dominants are present:

Thus, in addition to the other characteristics pertaining to secondary dominants must be added the observation that they are usually placed on a weak beat.

EXTENDED DOMINANTS

Dominant chords which are on strong stress points will NOT sound as secondary dominants. The typical location for these chords is either the beginning of a phrase or the beginning of the second half of a phrase:

II-7 V7 Imaj7 III-7
D7 G-7 C7 Fmaj7 A-7
(S) W S W

II-7 V7 Imaj7
D7 G-7 C7 Fmaj7
(S) W S W

Such chords are "**extended dominants**" and have an expectation to resolve down a perfect fifth to another extended dominant or any diatonic chord.

D7 G7 C7 F7

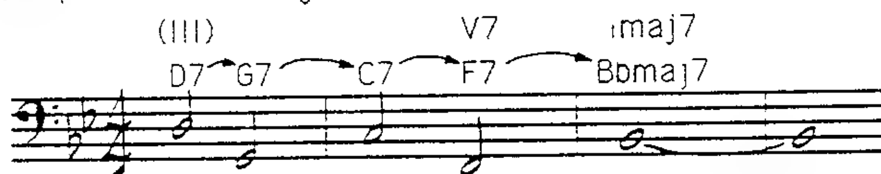
Once the extended dominant pattern starts, there is an expectation for it to continue, and eventually end with a diatonic resolution:

Imaj7
D7 G7 C7 F7 Bbmaj7

Therefore, extended dominants have one of two characteristics different than secondary dominants.

1) Extended dominants are either found on a strong stress or;
2) they are continuations of an extended dominant pattern which starts with an extended dominant.

The analysis for extended dominant motion is an arrow to the resolution down a perfect fifth. In order to locate the extended dominants' relation to the key, the scale degree of the root of the first extended dominant is included in parenthesis using its Roman numeral (without chord quality):



Each extended dominant in a series can be seen (and heard) as being temporarily in a key other than the eventual diatonic key:

D7 G7 C7 F7 Bbmaj7

D7

(Expected resolution to G7: V7/V in C)

D7 G7

(Expected resolution to C7: V7/V in F)

D7 G7 C7

(Expected resolution to F7: V7/V in Bb)

D7 G7 C7 F7

(Since this dominant is on the weakest stress of the progression, most listeners will expect it to function as V7; key of Bb.)

Thus, each of the extended dominants will be V7/V in a "**key of the moment**," except, usually the final dominant, if it is weakly stressed, will sound like the primary dominant. Additionally, to some experienced listeners, the chord which is actually functioning as V7/V (the C7 above) sounds like V7/V and not an extended dominant; its analysis as either an extended dominant or as V7/V is correct (since all extended dominants sound like V7/V).

Since all extended dominants function as V7/V in their key of the moment or the primary key, their available tensions are 9 and 13, the same as V7/V.

DECEPTIVE RESOLUTION

Another commonly found trait of extended dominants can be demonstrated if the previous example is continued with a secondary dominant occurring on a very weak stress point:

(III) D7 → G7 → C7 → V7 F7 → Imaj7 Bbmaj7 V7/III A7

S W S W S W S (W)

In context the A7 meets all the criteria for a secondary dominant. Its placement is weakly stressed and it has potential for a resolution to a strong stressed beat. Taken out of context however, it is the first in a series of dominant motion following the cycle of fifths: A7 D7 G7 C7 F7.

Therefore, this chord <u>sounds</u> like a secondary dominant, but <u>resolves</u> as an extended dominant. This is a commonly found example of "**deceptive resolution**", and requires an appropriate analysis.

Chords are first analyzed for their sound within the progression:

(III) D7 → G7 → C7 → V7 F7 → Imaj7 Bbmaj7 V7/III A7

Any deceptive resolution is parenthesized:

(III) D7 → G7 → C7 → V7 F7 → Imaj7 Bbmaj7 (V7/III) A7

(A7 does not resolve as V7/III to D-7.)

Then, justification for the chord's actual resolution is added. In the case of A7, the resolution is down a perfect fifth (not as V7/III, but as V7 of the extended dominant D7), and therefore, an arrow will show that:



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In summary:

1) Secondary dominants are dominant chords a perfect fifth above a diatonic chord. Their placement is on a relatively weak stress point with the chord of resolution on a stronger stress.

2) Secondary dominants are analyzed as V7 of the diatonic chord a perfect fifth below. If a secondary dominant resolves deceptively, the analysis is placed in parenthesis, and an added analysis is used to justify its actual resolution. The available tensions will reflect the secondary dominant chord's expected resolution, not its actual resolution.

3) Extended dominants are dominant chords which are placed at a strong stress point, or within a pattern of dominant resolution following the cycle of fifths with an extended dominant as the starting point for the pattern. The available tensions are 9 and 13 for extended dominants.

4) Extended dominants are analyzed with an arrow, since their expectation is to resolve down a perfect fifth. The first extended dominant of the pattern has the added analysis of its root's Roman numeral in parenthesis.

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MELODIC ANALYSIS

Almost all music has one common trait: repetition. The repeating of musical ideas will be one focus of the melodic analysis process Before describing the process, it is necessary to understand the ways in which melodic repetition occurs.

Most song forms (as described in Arranging) contain a certain amount of phrase repetition. In AABA form, three of the four phrases in the tune are the same or so similar that they can be said to be the same.

AABA



Some songs contain a repeated phrase which is only slightly different than the original phrase.

AABA'



The form for the above song is AABA' (AABA "prime"). The last phrase is so similar to the first two phrases that it can be identified as "A", even though it is not exactly the same.

Phrase repetition will be found in almost all common song forms: AABA, ABAC, ABA, ABCA, ABABC, etc. The form AB is most often repeated over and over resulting in the form ABABABAB etc. Twelve-measure blues is repeated to produce the form AAAAA etc.

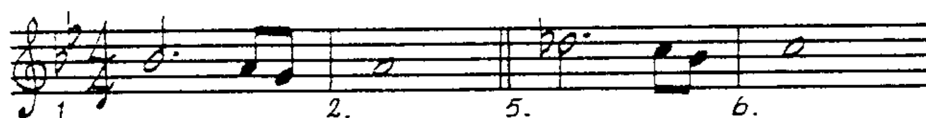
Melodic repetition occurs within phrases. Most phrases can be broken down into three areas:

1) Antecedent - the first half of the phrase which requires a:
2) Consequent - the second half of the phrase which may end with a:
3) Melodic cadence - movement to a point of rest.

An exception to phrase repetition is found in "**through-composed**" songs. Through-composed songs achieve unity through motivic repetition and manipulation rather than phrase repetition. A "**motif**" is a musical fragment. Most motifs are shorter than 2 measures in length. Melodic motifs may repeat themselves either exactly or in disguised fashion:

Motifs may be manipulated using any of the following methods or combinations:

1) **Transposition** (Motif moved to another pitch level. This is also known as **sequence**.)



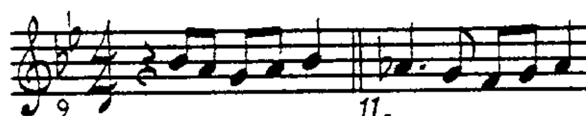
2) **Inversion** (Motif is presented upside down.)



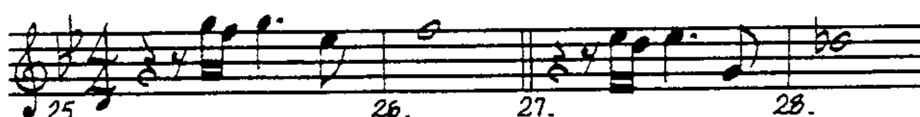
3) **Retrograde** (Motif is presented backwards.)



4) **Rhythmic variation**



5) **Melodic interval variation**



MELODIC ANALYSIS PROCEDURES

The first step in the melodic analysis process is to determine the song form. Phrases which repeat exactly will be analyzed exactly.

AABA'

Ebmaj7 Bbmaj7 Ebmaj7 Bbmaj7 C-7 F7
1. 2. 3. 4. 5.

Bbmaj7 G7(#9) 1. C-7 F7 Bbmaj7 2. C-7 F7 Bb
6. 7. 8. 15. 16.

Ebmaj7 Eb-6 Bbmaj7 Ebmaj7 Eb-6 Bb
17. 18. 19. 20.

G7 C7 D7 G7 C7 F7
21. 22. 23. 24.

G-7 D-7 Ebmaj7 Bbmaj7 C-7 F7
25. 26. 27. 28. 29.

Bbmaj7 G7(#9) C-7 F7 D-7 G7 C-7 F7 Bb
30. 31. 32. 33. 34.

Motifs should be enclosed in brackets ([ ]).

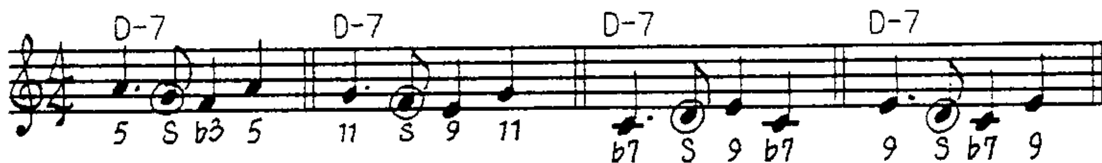
The next step in the analysis process is the identification of individual note relationships to each other and to the harmonies. Each notes will be either:

1) an available pitch
   (a) a chord tone or
   (b) an available tension.

2) an approach note

An "**approach note**" is a note which is a quarter note or less in duration and which moves by step to a chord tone or available tension. Approach notes are found in many configurations.

Passing tones are approach notes which move by step between two chord tones, between two available tensions, or between a chord tone and tension (or a tension and chord tone).



If the passing tone is diatonic to the key of the moment, it is analyzed as a "scale" approach note ("S").

The pitches preceding the passing tone and following it are identified with the number representing their harmonic relationship to the chord. In addition, the approach note is identified with its scale relationship to the chord:



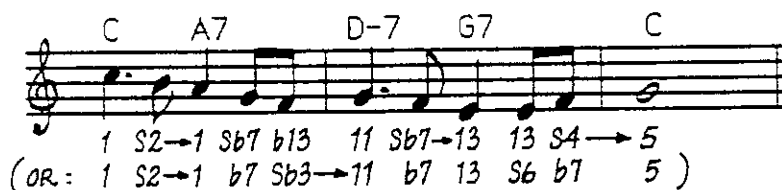
Passing tones may also be chromatic. Unlike scale passing tones, they will most often not be diatonic to the key of the moment. Chromatic passing tones are analyzed as "**Ch**" (for chromatic):



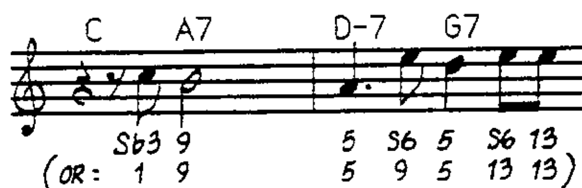
Approach note patterns may start during one chord but resolve to a note on another chord.



ALL APPROACH NOTES RESOLVE TO A NOTE AND CHORD OF RESOLUTION. They are analyzed relative to the chord of resolution.



An **unprepared approach note**, unlike a passing tone, has NO preparatory pitch but, like all approach note patterns, it must resolve. Unprepared approach notes are either preceded by a rest, leaped into, or a rhythmically repeated pitch:

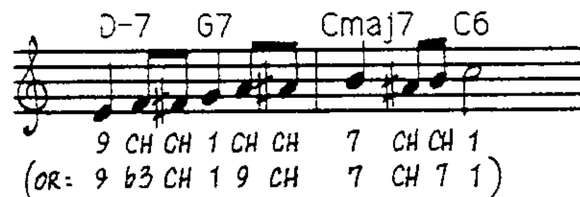


Neighbor tones are upper or lower movement from an available pitch and back to the same pitch (either by scale step or chromatic step):



In addition to the above approach note patterns which involve single melodic pitches, there are two easily recognizable multiple approach note patterns. **ALL APPROACH NOTES (SINGLE OR MULTIPLE) MAY TOTAL ONLY ONE BEAT**

The **double chromatic approach** is consecutive chromatic motion in the same direction to a note of resolution:

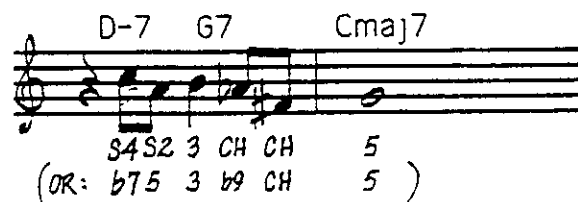


Note that the analysis for any form of chromatic approach notes(s) is **Ch**.

The other consecutive approach note pattern is the **indirect resolution**. Two approach notes appear, one above the note of resolution, and one below, and then the resolution occurs:



As with all approach notes, each note of the indirect resolution pattern is analyzed as **S** or **Ch:**



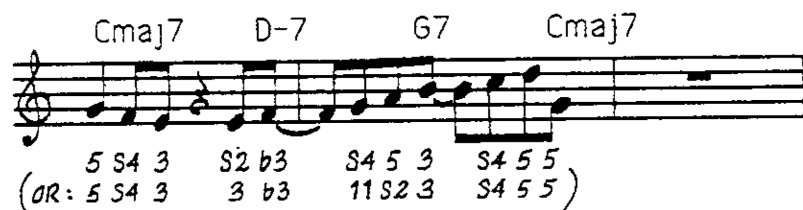
SPECIAL MELODIC ANALYSIS SITUATIONS

There are possible rhythmic alterations to melodies which affect the melodic analysis. (See "Arranging 1".)

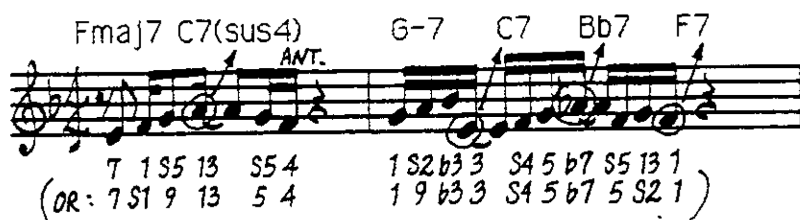
An **anticipation** is seen as a melody pitch occurring a 1/2 beat prior to a stressed beat (1 or 3). It may be tied into the beat it anticipates or there may be a rest on the beat:



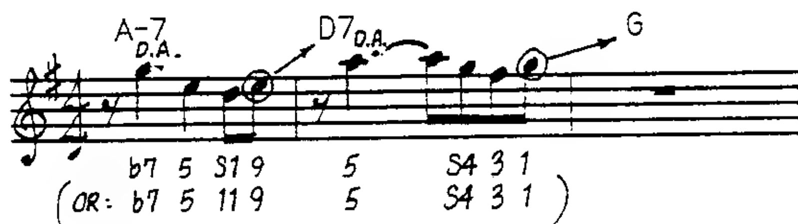
ANTICIPATIONS ARE ANALYZED WITH REGARD TO THE CHORD THEY ANTICIPATE AND THE CHORD SHOULD BE CONSIDERED TO ANTICIPATE ALSO:



Some styles of rock music and jazz incorporate **double time feel** notation. Anticipations in double time feel will appear as sixteenth notes:



The opposite of an anticipation is a **delayed attack**. Here the rhythmic alteration is seen a 1/2 beat after the stressed beat (1 or 3)



Infrequently, anticipations and delayed attacks may occur by a whole beat. This is most often seen in jazz compositions and arrangements:

Eb6 ANT. Bb7(sus4)
D.A.
5 5 5 5 5 1

Bb7 Eb7
1 1 13

A **melodic suspension** is a melody pitch which is tied into a different chord change for a beat or less. Melodic suspensions are analyzed as the chord tone or tension of the chord from which it is suspended:

D E7 A7 F#-7 E-7 A7
1 —— S6 b7 5 S4 3 11 —— 11 3
(OR: 1 —— 13 S4 5 S4 3 11 —— 11 3)

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The melodic analysis procedure in summary:

1) Note the song form.

2) Bracket each motif and include any melodic cadences.

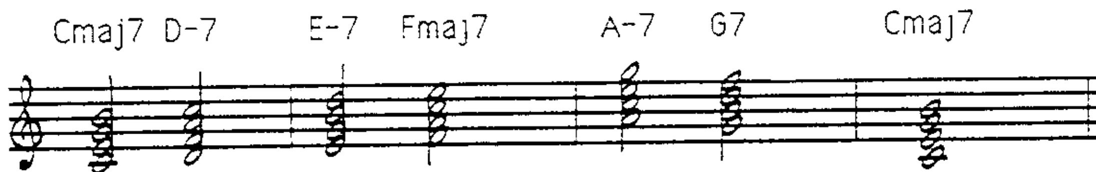
3) Analyze each note in the motif as either an available note from the chord structure or as an approach note to an available pitch. (S = scale approach; Ch = chromatic approach.)

4) Analyze repeated motifs with a repeated analysis.

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HARMONIC CONTINUITY - VOICE LEADING

Chords presented so far have been in "**close**"position. All the chord tones are as close as possible to adjacent chord tones:



Chords have been seen in root position as well as inverted:



Note that the top voice defines the required movement of the chord tones beneath it. If the top voice were not the controlling factor, the example could be "**voice led**." Any pitch (except the roots) from a chord structure would move to the nearest chord tone of the subsequent chord following an order of preference:

1) common tone (no movement)
2) half-step movement
3) whole-step movement
4) movement in thirds (major or minor)



When a harmonic progression is voice led (as above), "**harmonic continuity**" is said to be in effect. A progression can also be demonstrated by voice leading only the essential pitches of each chord. The essential chord tones are the root, third (or fourth on sus4 chords), and seventh (or sixth on 6th chords); these pitches make each chord sound major versus minor, and the major or minor seventh further defines the chordal sound.

Cmaj7 A7 D-7 G7 F#-7(b5) F-6 Cmaj7

Generally, the position for the starting chord structure is determined by sound; the best location for the chord tones (3rd and 7th) is within the following range:

The roots of the chords will be the foundation for the essential chord tones which are voice led following the previous list of linear intervallic motion. (Common tone; chromatic; whole step; thirds.)

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

Considering the list of preferential motion, chords progressing with unchanged root motion (chords with common roots) will use common tone and/or stepwise voice leading of the essential chord tones:

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

PARALLEL

(Unlike traditional practice, the use of parallel motion [two voices moving in the same direction with the same intervallic relationship] may occur in contemporary music.)

Chords which have root motion in fourths and fifths will have voice leading of the essential chord tones by common tone, chromatic, or whole step:

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

Step-wise root motion will require voice leading by step in parallel or similar motion (movement in the same direction):

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

Root motion in thirds will usually require that at least one of the essential chord tones is voice led in thirds also:

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

Intervallic voice leading larger than thirds is generally not necessary.

GUIDE TONE LINES

The result of the previous voice leading of the essential chord tones is root motion and the two "**guide tone lines**." Guide tone lines are single lines which are developed by the voice leading of the essential chord tones and guide the listener through the chord progression.

Individual guide tone lines may be one of three configurations: either one of the two lines created from the previous process or a combination of the two lines from the voice leading process.

Cmaj7 D7 D-7 G7 F#-7(b5) F-7 D-7 Bb7 C6

If the developing guide tone line appears to be approaching the limits of the given range, an adjustment may be made by utilizing one of the following alternatives:

1) Within the duration of the chord, it is possible to leap from a guide tone to either:

a) the same guide tone note an octave higher, or

Cmaj7 A-7 Fmaj7 D-7

b) another guide tone line.

Cmaj7 A-7 Fmaj7 D-7

2) Or voice leading may be suspended and the line started again at a different pitch level either:

a) following a cadence to the I chord, or
b) at the end of a phrase.

Ebmaj7 Bbmaj7 Ebmaj7 Bbmaj7 C-7 F7

Bbmaj7 G7(#9) 1. C-7 F7 Bbmaj7 2. C-7 F7 Bb6

Ebmaj7 Eb-6 Bbmaj7 Ebmaj7 Eb-6 Bbmaj7

G7 C7 D7 G7 C7 F7

G-7 D-7 Ebmaj7 Bbmaj7

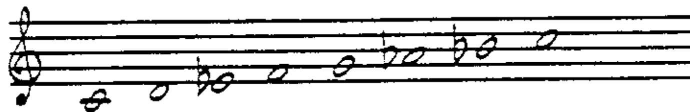
C-7 F7 Bbmaj7 G7(#9) C-7 F7 Bb6

MINOR KEY HARMONY - NATURAL MINOR

Minor key harmonies are similar to major key harmonies.

The common minor key scales are:

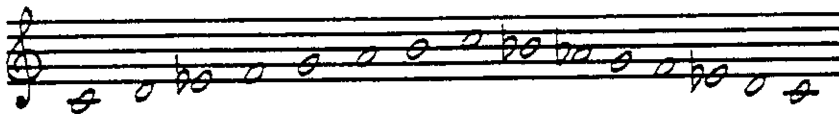
Natural minor:



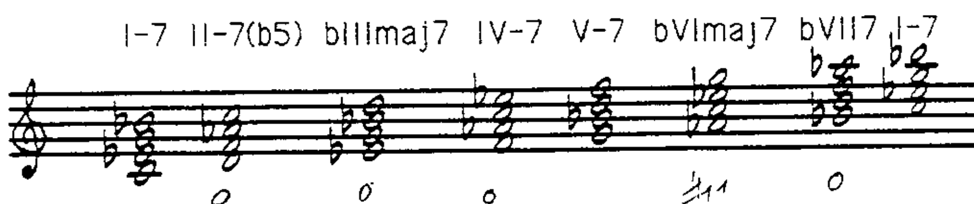
Harmonic minor (natural minor **with** a raised seventh scale scale degree):



Melodic minor (natural minor with both a raised sixth and seventh degrees ascending and natural minor descending):



The diatonic chords in natural minor are:



It should be noted that the diatonic chords built upon the third, sixth, and seventh scale degrees are labeled relative to their location above the tonic: a minor third (bIII); a minor sixth (bVI); a minor seventh (bVII).

Since natural minor shares the same diatonic structures as the related major key, the context in which the chords appear determines the tonality, major or minor:

I-7 C-7	IV-7 F-7	I-7 C-7	V-7 G-7
1	2	3	4

I-7 C-7	IV-7 F-7	bVII7 Bb7	I-7 C-7
5	6	7	8

Two important characteristics about the diatonic chords in natural minor are:

1) The diatonic chord built upon the dominant scale degree of the key (scale degree 5, the V-7) is <u>not</u> a dominant structure; it does not contain a tritone.

2) The diatonic chord which <u>is</u> a dominant seventh chord structure is built upon the seventh scale degree (bVII7).

When observed in context, the V-7 does not receive an arrow for analysis since it is not a dominant chord wih resolution down a perfect fifth:

I-7 C-7	V-7 G-7	I-7 C-7
3	4	5

The diatonic chord in natural minor which is a dominant structure is <u>not</u> built upon the dominant (5th) scale degree of the key. The bVII7 is an example of a dominant chord without dominant function:

IV-7 F-7	bVII7 Bb7	I-7 C-7
6	7	8

The typical cadences in natural minor are:

V-7 I-7
G-7 C-7

1 Sb2 b3 1

V-7 to I-7 (Melodic analysis is included.)

IV-7 to I-7

IV-7 I-7
F-7 C-7

9 b3 11 1
OR: 9 b3 Sb7 1

bVII7 I-7
Bb7 C-7

13 b7 1 1
OR: 13 b7 Sb7 1

bVII to I-7

II-7(b5) to I-7

II-7(b5) I-7
D-7(b5) C-7

11 b5 b13 1
OR: 11 b5 Sb7 1

bVImaj7 I-7
Abmaj7 C-7

7 S1 9 1
OR: 7 1 Sb7 1

bVImaj7 to I-7

important

AVAILABLE TENSIONS - NATURAL MINOR

The available tensions for diatonic chords in minor tonalities are normally those which are diatonic. However, optional tensions exist which are generated from other forms of minor keys.

Chord:	Available Tensions(s)	Optional Available Tension(s):
I- (triad)	9	
I-7	9, 11	13
II° (triad)		11
II-7(b5)	11	b13
bIII (triad)	9	#11
bIIImaj7	9, 13	#11
IV- (triad)	9	11
IV-6	9, 11	maj7*
IV-7	9, 11	13
IV-(maj7)*	9, 11, 13	
V-(triad)		9, 11
V-7	11	9, 13
bVImaj7	9, #11, 13	
bVII7	9, #11, 13	

*The IV-(maj7) chord is not diatonic to any minor key since it contains scale degree major 3. It is listed here since it is commonly found in place of IV-, IV-6, or IV-7.

HARMONIC MINOR

The lack of dominant seventh motion from V7 to I in natural minor led to the development of harmonic minor. The diatonic chord built upon the 5th scale degree in harmonic minor is dominant:

I-(maj7) II-7(b5) bIII+maj7 IV-7 V7 bVImaj7 VII°7 I-(maj7)

This alteration to natural minor for **harmonic** purposes can be seen as the reason for the name **harmonic minor**.

Three unusual diatonic chord structures are found in harmonic minor.

1) I-(maj7) is a minor triad with a major seventh.
2) bIII+maj7 is an augmented triad with a major seventh.
3) VII°7 is a diminished seventh chord.

In harmonic minor, an arrow is used to show dominant resolution from V7 to I-:

I- | IV-7 V7 | II-7(b5) V7 → | I-
C- | F-7 G7 | D-7(b5) G7 | C-

bVImaj7 | V7 | bVImaj7 VII°7 | I-
Abmaj7 | G7 | Abmaj7 B°7 | C-

The typical cadences in harmonic minor are:

V7 G7 → I- C-

1 b9 3 1
OR: 1 b9 S7 1

V7 to I- [or I-(maj7)] (melodic analysis is included.)

IV-7 F-7 — I-(maj7) C-(maj7)

IV-7 to I-(maj7)

b3 9 1 b3
OR: b3 9 S4 b3

II-7(b5) V7(b9) → I-
D-7(b5) G7(b9) → C-

11 b9 3 1
OR: 11 b9 S7 1

II-7(b5) to V7 to I-
(All root motion is down in perfect fifths.)

VII°7 B°7 — I- C-

VII°7 to I-

T bb7 1 1
OR: T bb7 S7 1

[VII°7 can be seen as the upper structure of V7(b9).]

G7(b9) B°7

bVImaj7 Abmaj7 — I-(maj7) C-(maj7)

bVImaj7 to I-(maj7)

5 13 MAJ 7 5
OR: 5 13 S5 5

AVAILABLE TENSIONS - HARMONIC MINOR

The available tensions for diatonic chords in minor tonalities are normally those which are diatonic. However, optional tensions exist which are generated from other forms of minor keys.

Chord	Available Tension(s):	Optional Available Tension(s):
I- (triad	9	
I-(maj7)	9, 11	13
II°(triad)		11
II-7(b5)	11	b13
bIII+ (triad)	9	#11
bIII+maj7	9	#11
IV-(triad)	9	
IV-6	9, 11	maj7 *
IV-7	9, 11	13
IV-(maj7)*	9, 11, 13	
V (triad)		9
V7	b13	9 OR b9 and #9 **
bVImaj7	9, #11, 13	
VII°7	All available tensions must be diatonic and a major ninth above a chord tone. The numbering system to 13 does not work here since there are four potential tensions.	

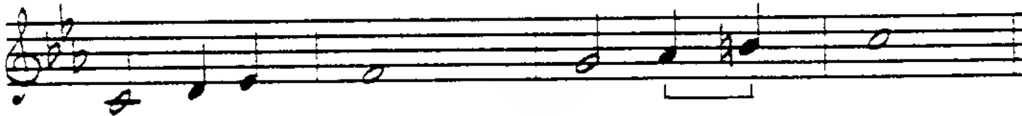
* The IV-(maj7) chord is not diatonic to any minor key since it contains scale degree major 3. It is listed here since it is commonly found in place of IV-, IV-6, or IV-7.

** b5 is sometimes used as a special chord tone on the V7 chord.

MELODIC MINOR

Melodies built from the harmonic minor scale have an unusual sound because of the augmented second interval from scale degrees b6 to 7.

Harmonic Minor



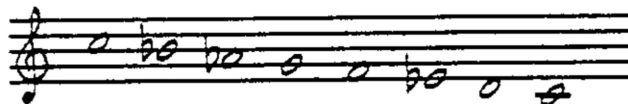
Melodic Minor (ascending)

I-(maj7) II-7 bIII+maj7 IV7 V7 VI-7(b5) VII-7(b5) I-(maj7)



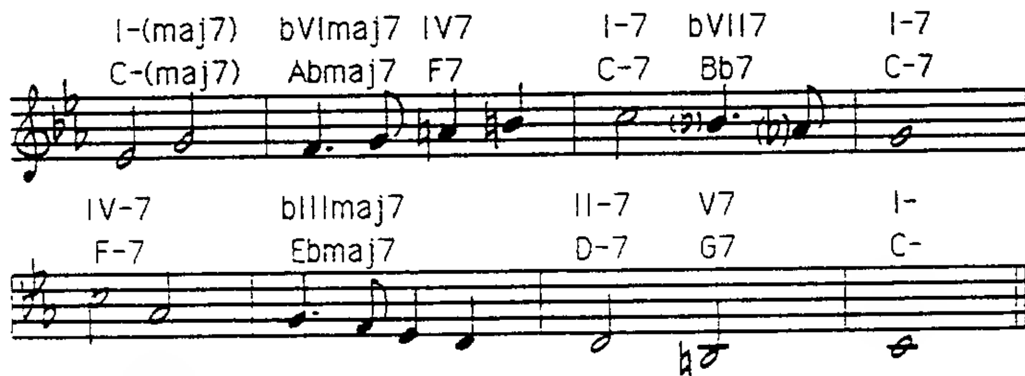
The traditional melodic minor scale above utilizes a raised 6th and 7th scale degrees when ascending melodically. This allows for the use of a dominant seventh chord on the fifth degree of the scale.

The 6th and 7th scale degrees are lowered when descending melodically. The resulting diatonic chords are thus the same as those in natural minor.



The alteration of the harmonic minor scale for **melodic** purposes is the reason for the name **"melodic minor"**.

As is the case with the bVII7 of natural minor, the IV7 of melodic minor represents a dominant structure without dominant function:



The typical cadences derived from the ascending melodic minor scale are:

V7 → I-
G7 C-

V7 to I- (Melodic analysis is included.)

1 9 3 1
or: 1 9 S7 1

II-7 to V7 to I-
(All root motion is down in perfect fifths.)

II-7 V7 → I-
D-7 G7 C-

11 9 3 1
or: 11 9 S7 1

IV7 I-
F7 C-

IV7 to I-

9 3 #11 1
or: 9 3 S7 1

II-7 I-
D-7 C-

II-7 to I-

11 5 S6 1

VII-7(b5) I-
B-7(b5) C-

VII-7(b5) to I-

b13 b7 1 1
or: b13 b7 S7 1

Additional cadential motion may occur using chords generated from the descending melodic minor scale (see the typical cadences of natural minor).

AVAILABLE TENSIONS - MELODIC MINOR

The available tensions for diatonic chords in minor tonalities are normally those which are diatonic. However, optional tensions exists which are generated from other forms of minor keys. The available tensions for the diatonic melodic minor chords derived in its descending form may be found under "Available tensions - natural minor".

Chord:	Available Tension(s):	Optional Available Tension(s):
I-(triad)	9	
I-6	9, 11	maj7
I-(maj7)	9, 11, 13	
II-(triad)		11
II-7	11	
bIII+(triad)	9	#11
bIII+maj7	9, #11	
IV (triad)	9	#11
IV7	9, #11, 13	
V(triad)	9	
V7	b13	9 OR b9 and #9*
VI-7(b5)	11, b13	9
VII-7(b5)	11, b13	

* b5 is sometimes used as a special chord tone on the V7 chord.

SECONDARY AND EXTENDED DOMINANTS IN MINOR KEYS

In addition to the use of diatonic chords, minor key chord progressions may include secondary dominants and extended dominants:

I- V7/V V7 I- V7/V V7
D- E7(b9) A7 D- E7(b9) A7

I- V7/IV IV- bVII7 I- (V7/II)
D- D7 G- C7 D- B7

E7 A7 D7 G7

C7 F7 bVImaj7 V7
Bbmaj7 A7

I- V7/V V7 I- V7/V V7
D- E7(b9) A7 D- E7(b9) A7

I- V7/IV IV- bVII7 I-
D- D7 G- C7 D-

As with the use of extended dominant motion in major keys, the extended dominants in minor keys will function in a key of the moment and have available tensions 9 and 13. The available tensions for the secondary dominants will be diatonic and meet the criteria for available tensions. However, since the 6th and 7th scale degrees of any minor key may be natural or raised, these diatonic pitches allow for different options for some of the secondary dominants' available tensions. For example:

V7/II — b13, 9
B7(9) from harmonic or melodic minor

V7/II — b13, b9
B7(b9) from natural minor

V7/V — 13, b9
E7(13) from harmonic or melodic minor

V7/V — b13, b9
E7(b13) from natural minor

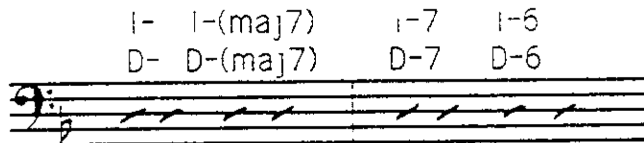
Additionally, bVII7 and IV7 can be seen as having secondary dominant potential; both are a perfect fifth above a diatonic chord (bIII and bVII respectively). However, the diatonic function of these chords is stronger than their potential secondary dominant function; they are diatonic chords bVII7 and IV7 as opposed to V7/bIII or V7/bVII, even though they may progress as such:

I- II-7(b5) V7 I- bVII7 bIII+maj7 IV7 bVII7 V7 I-7

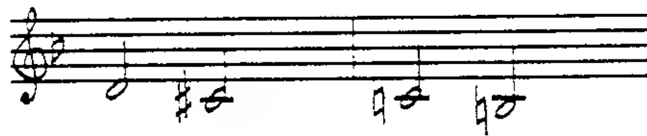
D- E-7(b5) A7 D- C7 F+maj7 G7 C7 A7 D-7

LINE CLICHES

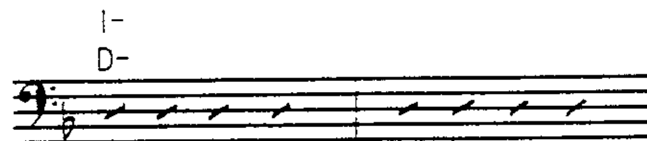
A **line cliche** is a single line which moves through a single chord. The line cliche will always move chromatically:



The above line cliche can be identified as the single line:



While the basic chord remains:



Line cliches are very common to minor key harmonies.

Other characteristics of line cliches are:

1) They may occur on the top; in the middle; or, if the line cliche starts on the root of the chord (as the above line cliche does), on the bottom of the voicings.

2) They are used as guide tone lines and as lines developed in the voice leading process.

3) They always appear in the area of the chord above the 5th and below the root.

Another of the most common line cliches is:



Line cliches do not always continue their motion in the same direction:



When a line cliche is present, the available tensions are those for the triad.

Other line cliches can be found by starting on 6, -7, or maj7 chord degrees and moving chromatically:



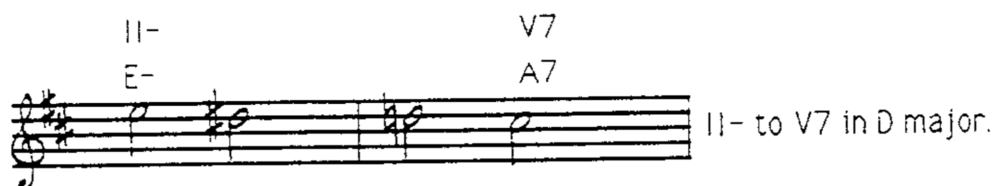




Though line cliches are fundamentally associated with minor tonalities, they may be seen in major key harmonies. Most often on the I or IV chords:



or on the II- or VI- or IV- chords When the line cliche occurs on the II- chord, it often progresses to the V7 chord:



II- to V7 in D major.



VI- in D major.



IV- in D major.

Less often the line cliche may appear on the III- chord.

MODAL INTERCHANGE

MODAL INTERCHANGE IS THE BORROWING OF DIATONIC CHORDS FROM A PARALLEL MODE (SCALE) AND USING THEM IN THE PRIMARY KEY:

Primary key: (natural minor)
F-7 G-7(b5) AbMaj7 Bb-7 C-7 Dbmaj7 Eb7 F-7

Parallel key: (melodic minor)
F-(maj7) G-7 Ab+maj7 Bb7 C7 D-7(b5) E-7(b5) F-(maj7)

Modal interchange between minor tonalities is a very common harmonic practice in contemporary minor key tunes:

F natural minor:

F-7 Bb-7 Eb7 C-7

F-7 G-7 F-7 C-7 F-7

Borrowed from
F melodic minor

The use of minor tonality chords in major key harmonies is a commonly found example of modal interchange. Such chords are borrowed from the parallel minor key (the key of I-), and used in the parallel major key (the key of I major).

Primary key: (F major)

Fmaj7 G-7 A-7 Bbmaj7 C7 D-7 E-7(b5) Fmaj7

Parallel key: (F natural minor)

F-7 G-7(b5) Abmaj7 Bb-7 C-7 Dbmaj7 Eb7 F-7

The natural minor modal interchange chords borrowed for major key use are: IV-, IV-6, IV-(maj7), IV-7 (all the forms of the IV- chord.)

IV- Imaj7 IV-6 Imaj7 IV-7 Imaj7 IV-(maj7) Imaj7

Bb- Fmaj7 Bb-6 Fmaj7 Bb-7 Fmaj7 Bb-(maj7) Fmaj7

bVImaj7:

bVImaj7: Imaj7

Dbmaj7 Fmaj7

bVII7:

bVII7: Imaj7

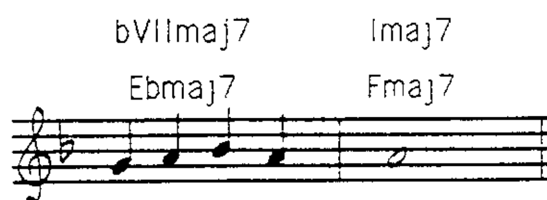
Eb7 Fmaj7

The harmonic minor modal interchange chords borrowed for major key use are:

II-7(b5) V7(b9) II-7(b5) V7(b9) Imaj7

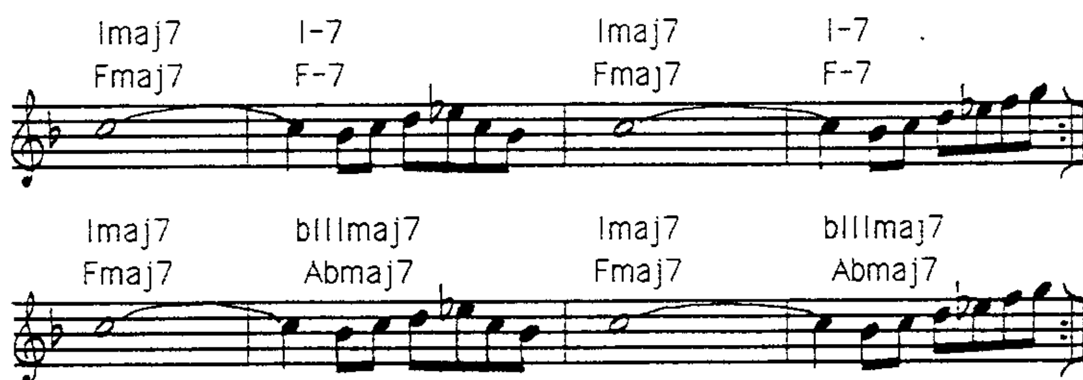
G-7(b5) C7(b9) Fmaj7

bVIImaj7, though not diatonic to any minor key, is a very common modal interchange chord:



bIImaj7, though not diatonic to any minor key, is a very common modal interchange chord.

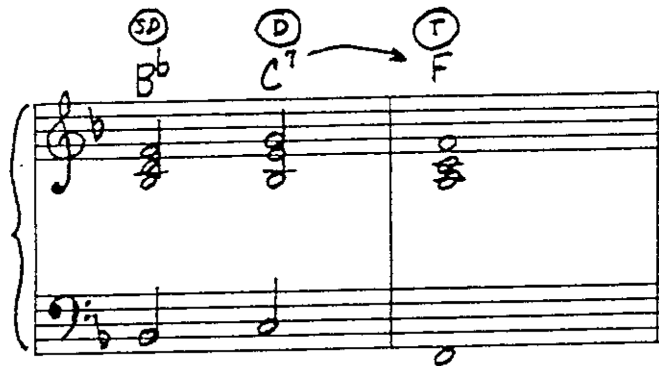
The tonic natural minor chords I-, I-7, bIII, and bIIImaj7 are also found as modal interchange chords in major:



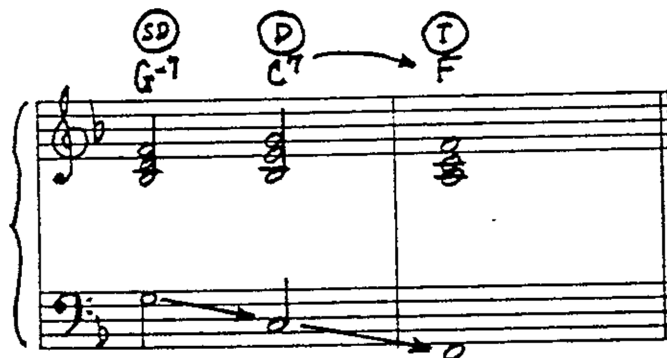
The available tensions for modal interchange chords are the same as listed in their minor key context.

RELATED II-7 CHORDS

The full cadence is represented by the progression of subdominant to dominant to tonic chords:



The most common variation of the full cadence has strong root motion of perfect fifths throughout:



Just as an arrow is used to show the perfect fifth root motion between the dominant chord and its chord of resolution, the relationship between the II-7 and the dominant V7 is so strong as to require recognition. A solid bracket beneath the II-7 V7 is used to show the perfect fifth root motion:



The above progression is all diatonic; II-7, down a perfect fifth to V7, down a perfect fifth to I. This II-7 V7 relationship is so strong that: <u>ANY DOMINANT CHORD MAY BE PRECEDED BY ITS RELATED II-7 CHORD.</u>

A-7 D7 D-7 G7 G-7 C7 C-7 F7 F-7 Bb7 Bb-7 Eb7 Eb-7 Ab7

Ab-7 Db7 Db-7 Gb7 F#-7 B7 B-7 E7 E-7 A7

The related II-7 chord of some secondary dominants will also be diatonic. Such diatonic minor seventh chords have <u>DUAL FUNCTION</u>.

I F | III-7 A-7 V7/II D7 | II-7 G-7 V7 C7 | I(9) F(9)

VII-7(b5) E-7(b5) V7(b9)/VI A7(b9) | VI-7 D-7 V7/V G7 | II-7 G-7 V7 C7 | Imaj7 Fmaj7

The diatonic analysis and the bracket show the dual function. The available tensions for dual function chords (III-7, VI-7, VII-7(b5)) are usually diatonic.

Other related II-7 chords which are not diatonic have available tensions from the key of the moment:

Imaj7 Fmaj7 | E-7 V7/VI A7 | VI-7 D-7 | C-7 V7/IV F7

(11 9) = II-7 in D (11 9) = II-7 in B^b

IVmaj7 B^{b}maj7 | B-7 V7/III E7 | III-7 A-7 II-7 G-7 | I6 F6

(11 9) = II-7 in A

The ⌴ relation may appear as II-7(b5) V7(b9) (as in harmonic minor):

II-7(b5) V7(b9) → Imaj7 I6

G-7(b5) C7(b9) Fmaj7 F6

Indeed, any of the following variations to the ⌴ may occur without changing the dominant function of the V7 chord:

G-7 C7 → F

G-7(b5) C7(#9 b9) → F

G-7 C7(#9 b9) → F

G-7(b5) C7(9) → F

Harmonic rhythm directly affects the └─┘ relationship. With the inclusion of a dominant chord's related II-7 , harmonic activity is increased without deterring from the dominant resolution. The harmonic rhythm of the └─┘ may be even:

B-7 E7 A

S W s w

B-7 E7 A

S W s w

or the II-7 may appear for longer duration than the dominant:

C-7 F7 B♭

S W s w S W s w

C-7 F7 B♭

S W s w S W s w

or, less often, the dominant chord may appear for longer duration than the II-7:

A-7 D7 G

S W s w S W s w

A-7 D7 G

S W s w S W s w

Therefore, the II-7 will appear on a strong stress, the V7 on a weaker stress, and the resolution will be to a strong stress.

A ⌴ may repeat prior to progressing:



Line cliches commonly occur with a II- V7:



Related II-7 chords of extended dominants may be either the chord of resolution:



or, they will be INTERPOLATED prior to the chord of resolution (the extended V7):

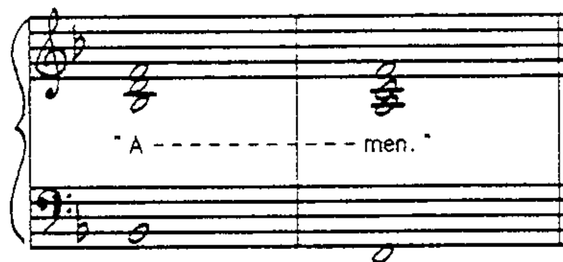


BLUES

Blues harmonies have their basis in early American church music. The primary cadence used in hymns of the Protestant church has been subdominant (with dominant cadence being of less importance). Subdominant cadence is traditionally called "plagal cadence":

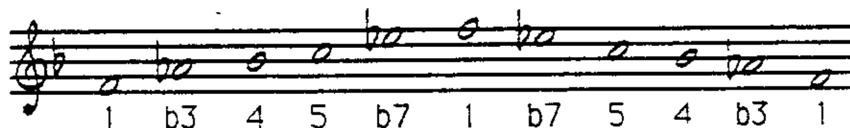


Typical of plagal cadence is the sound of "A-men", used following most hymns:



Thus, the primary chords found in blues are the I and IV chords (and occasionally the V7 chord).

The basic scale used for blues melodies is a pentatonic (5 note) scale, but NOT the major pentatonic scale. The blues scale is NOT diatonic to the harmonies:



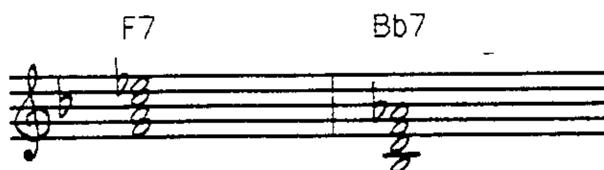
The above blues scale (scale degrees 1, b3, 4, 5, b7, 1) can be seen as a minor pentatonic scale. The important characteristic of the blues scale is its exclusion of any half steps and the relationships it creates with the major key harmonies; the scale degrees b3 and b7 being the basis for the minor pentatonic scale create an unusual sound when supported by the major key harmonies. This melodic relationship results in what is called "blues notes":



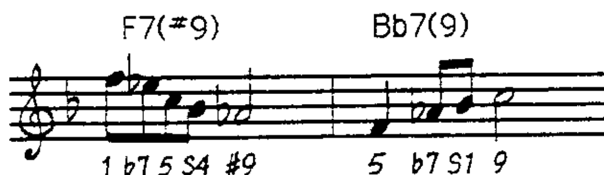
When the blues melodic pitches are superimposed over the basic harmonic structures, the extensions for the seventh degrees of the fundamental chords can be added:



The I and IV triads therefore become I7 and IV7 respectively:



The basic available tensions for the primary chords are those which appear melodically:



An exception to the previous observations regarding available tensions should be noted in the case of the I7(#9) chord in blues. Though b9 and #9 normally may coexist, b9 should not be used with #9 on the I7 in blues since it is not part of the blues scale.

The blues form has its origins in the poetic form used for the improvisation of lyrics. The lyrical content of blues is based on a "rhymed couplet" with the first line of the couplet repeated (to allow for additional time to improvise the second line). The rhythm of the lyrics can be notated as dotted quarter, eighth notes with five stressed pulsations (this lyrical rhythm is known as "iambic pentameter"):

By studying the stress placement of the melody and lyrics, it can be noted what the overall form will be:

Sung lyrics - First couplet line ____

Sung lyrics - Repeated first line ___

Sung lyrics - Second couplet line ___

The above will therefore be a 12 measure form (also known as "12 bar blues").

The placement of the primary chords follows a logical sequence: the I7 chord receives the most stress; it will also be cadenced to from the IV7 chord. In order to have a variance during the repeating of the first line of the couplet, the IV7 chord is used with a cadence to I7; the final line of the couplet contains the final cadence:

F7

First couplet line ____________ Strum ____________

Bb7 F7

First couplet line repeated (lyrics and melody) Strum ____________

Bb7 F7

Second couplet line with cadence ______ Strum ____________

It should be noted that all the lyrical content of a fundamental blues, as the one above, is within the first 2 measures of each 4 measure phrase; the remaining 2 measures begins with a cadence and the chordal content is the I7 chord. Since blues was most often performed by a soloist, accompanying himself/herself, the last 2 measures of each 4 measure phrase came to be known as the "**strum**", for obvious reasons.

The next higher level of complexity would be for blues harmonies to contain dominant motion. This action would then incorporate diatonic sounds from major key harmony.

I7
F7

IV7
Bb7

I7
F7

IV7
Bb7

V7
C7

I7
F7

Dominant cadence

The basic blues melodic scale has become more complex also; it now contains chromatic motion between the 4th and 5th scale degrees - b5 or #4. The contemporary blues notes are b3, b5 (#4), b7:

1 b3 4 #4 5 b7 1 b7 5 b5 4 b3 1

AVAILABLE TENSIONS - BASIC BLUES

The available tensions for the three basic blues chords are those from the extended structures which meet the previous criteria: diatonic to the blues scale and either a 9th, or a #9th or an allowable b9th above a chord tone:

Chord:	Normal blues structure:	Optional Structure with diatonic major key tensions:
I7	I7 (#9)	I7 (#9, 13) OR I7 (9, 13)
IV7	IV7 (9)	IV7 (9, 13)
V7	V7 (#9)	V7 (b9, #9, b13) OR V7 (9, 13)

(Any diatonic chords or secondary dominants from major key harmonies will have available tensions from their major key context.)

BLUES VARIATIONS

There is one important characteristic which can be seen in all blues: the placement of the primary chords within the 12 measure form:

Tonic

First couplet line ______________ Strum __________

Subdominant Tonic

First couplet line repeated __________ Strum ____________

Cadence ___________________ Tonic

Second couplet line ______________ Strum __________

Variations to blues demonstrate this pattern in two different ways:

1) Harmonic motion from and back to the primary chord in each area of the form, and/or

2) Harmonic motion to the next primary chord.

Thus, a tonic chord will appear in the first measure; any subsequent harmonic activity in the first 4 measure phrase will be back to a tonic chord and/or motion to the subdominant chord which will appear in measure 5:

Tonic
F7 Bb7 F7 A-7(b5)
1 2 3 4

Subdominant
Bb7
5 6 7 8

9 10 11 12

In the above example, there is a subdominant cadence back to the primary chord (tonic) from measure 2 to 3; measure 4 contains a commonly used blues chord which approaches the IV7 chord. The III-7(b5) chord can be identified as an upper structure of the I9 chord (which may also be seen as the secondary dominant of IV7 [V7/IV]):

I7 or
V7/IV
III-7(b5)
F7
A-7(b5)

Measures 5 and 6 will start with the subdominant and contain motion back to subdominant and/or have movement to tonic in measure 7:

Tonic
F7 Bb7 F7 A-7(b5)
1 2 3 4

Sub-dominant
Bb7 F7 Bb7 B°7
Tonic
F7/C
5 6 7 8

9 10 11 12

The B°7 occurring in measure 6 is another commonly found blues chord. The #IV°7 chord is an approach chord to I from IV; most often the resolution of its root is chromatic and therefore the I7 chord appears inverted:

Bb7 B°7 F7/C

Measures 7 and 8 start with the tonic and either move back to tonic and/or have motion to cadence chords in measures 9 and 10. The cadential motion may be either dominant, subdominant, and/or modal interchange cadence chords borrowed from minor:

Tonic
F7 | Bb7 | F7 | A-7(b5)
1 2 3 4

Subdominant
Bb7 F7 | Bb7 B°7 | Tonic F7/C Bb7 | F7 D7
5 6 7 8

Cadence
G-7 C7 | Bb7 Eb7 | Tonic F7 |
9 10 11 12

The above cadential motion contains dominant (C7 - V7), subdominant (Bb7 - IV7), and a non-dominant chord borrowed from natural minor (Eb7 - bVII7).

Since measures 11 and 12 begin with the tonic and the first measure is also tonic, any harmonic motion here will be back to tonic:

Tonic
F7 | Bb7 | F7 | A-7(b5)
1 2 3 4

Sub-dominant | | Tonic |
Bb7 F7 | Bb7 B°7 | F7/C Bb7 | F7 D7
5 6 7 8

Cadence _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ | | Tonic |
G-7 C7 | Bb7 Eb7 | F7 D7 | G7 C7
9 10 11 12

Another contemporary blues chord (also found in major key harmonies) has its basis in subdominant cadence. In the following blues progression there appears a IV of the I chord and a IV/IV (IV of the IV chord):

I IV | I | I IV | I
G C | G | G C | G

IV IV/IV | IV | I IV | I
C F | C | G C | G

IV IV/IV | IV V7 | I IV | I
C F | C D7 → | G C | G

In a more complex situation, the same chord (IV/IV) would be analyzed as bVII:

I7 IV7 bVII7 I7 III-7(b5)
G7 C7 F7 G7 B-7(b5)

IV7 bVII7 I7 V7/II
C7 F7 G7 E7

II-7 V7 bVII7 I7
A-7 D7 F7 G7

The following chart includes examples of blues progressions. The 12 measure form and placement of the primary chords adheres to the previous requirements. Note that some of the examples use blues chords only, some use major key harmonies and some use minor key harmonies.

TONIC SUBDOMINANT TONIC CADENCE- - - - TONIC

1 2 3 4 5 6 7 8 9 10 11 12

F7 Bb7 F7 Bb7 Eb7

1 2 3 4 5 6

F7 D7 G-7 C7 Bb7 F7 Bb7

7 8 9 10 11 12

F-7 Bb-7 F-7 F7 Bb-7 C7(b9)

1 2 3 4 5 6

F-7 Abmaj7 G-7(b5) C7(#9) F-7 Bb-7

7 8 9 10 11 12

Fmaj7 E-7 A7 D-7 G7 C7 F7 Bbmaj7 Bb-6

1 2 3 4 5 6

Fmaj7 A-7 D7 G7 C7 Bb7 Eb7 Fmaj7 G-7 A-7 Bb-7

7 8 9 10 11 12

F7 E7 A7 D7 G7 C7 F7 Bb7 Bb-7 Eb7

1 2 3 4 5 6

F7 Eb7 D7 G-7/C C7 Db Gb F7 Eb7

7 8 9 10 11 12

F7 Bb7 F7 F7 Eb7 F7 Bb7 Eb7 Bb7

1 2 3 4 5 6

F7 Bb7 F7 Bb7 Eb7 Bb7 Eb7 A-7 D7 G-7 C7(sus4)

7 8 9 10 11 12

TONIC SUBDOMINANT TONIC CADENCE- - - - TONIC

1 2 3 4 5 6 7 8 9 10 11 12

F6 G-7 A-7 G-7 Fmaj7 Abmaj7 Bb6 Bb-6

1 2 3 4 5 6

A-7 D7(#9) G-7(b5) C7(#9,b9) F6 A-7(b5) Bb-7

7 8 9 10 11 12

F-6 Bb7 C7 F-(maj7) Dbmaj7 Bb-(maj7) Bb-7 Bb-6

1 2 3 4 5 6

Abmaj7 D9 G7 C7 Gbmaj7 F-(maj7) Bb-6

7 8 9 10 11 12

F7 Bb7 Bo7 F7/C A-7(b5) Bbmaj7 Bb-7 Eb7

1 2 3 4 5 6

Abmaj7 Dbmaj7 C7 Eb7 G-7 Bb-7 F7 D7 G7 C7

7 8 9 10 11 12

F7 A-7(b5) Bb7 Bo7 F7(sus4) F7 A-7(b5) Bb7 Gbmaj7

1 2 3 4 5 6

F7 Eb7 Abmaj7 Dbmaj7 C7(sus4) Bb7(sus4) F Abmaj7 Dbmaj7 Gbmaj7

7 8 9 10 11 12

F Bb F Bb F F7 Eb Bb Eb Bb Eb7

1 2 3 4 5 6

F Bb F Eb Bb Eb Bb Eb7 F Bb

7 8 9 10 11 12